

Claims

1. A method for implementing Wide Area Centrex (WAC), where a corresponding relationship between long number and short number of the WAC users is set and saved, the method comprising:

5 routing a call a calling user initiates to a soft-switch;

receiving by the soft-switch the call information the calling user initiates and determining that the calling user is a WAC user based on the calling number;

determining a route to the called WAC user based on the call information and completing the call.

10 2. The method according to Claim 1, wherein said calling WAC user is a Next Generation Network (NGN) user and said called WAC user is a Public Switched Telephone Network (PSTN) / Public Land Mobile Network (PLMN) user;

the step of routing a call a calling user initiates to a soft-switch comprises: the NGN user dialing the short number of the called user, and initiating the call to the
15 soft-switch;

the step of receiving by the soft-switch the call information the calling user initiates comprises: the soft-switch directly receiving the short number of the called user that the NGN user dials;

the step of determining the route to the called user and completing the call
20 comprises: the soft-switch starting its own analysis of Central Exchange (Centrex) numbers, obtaining the long number of the called user according to the saved long number and short number corresponding relationship, and routing the call to the Local Switch(LS) to which the called user belongs according to the obtained long number and completing the call.

25 3. The method according to Claim 1, wherein said calling WAC user is a PSTN/PLMN user;

the step of routing the call a user initiates to the soft-switch comprises: the PSTN/PLMN user dialing an out-group prefix of the WAC, and routing the call to the soft-switch after the LS to which the PSTN/PLMN user belongs determines through detection that the out-group prefix is the out-group call prefix of the WAC;

- 5 the step of the soft-switch receiving the call information the calling user sends comprises: the soft-switch receiving the out-group prefix the LS sends;

the step of determining the route to the called user and completing the call comprises: the soft-switch obtaining the data of the Centrex according to the calling number, starting its own analysis of Centrex numbers to determine that the call is an out-group call, then deleting the out-group prefix and starting the procedure for handling an out-group call in IP Centrex service.

4. The method according to Claim 1, wherein the calling WAC user is a PSTN/PLMN user;

the step of routing a call a calling user initiates to a soft-switch comprises: the PSTN/PLMN user dialing the long number of the called user, and the LS to which the PSTN/PLMN user belongs routing the call to the soft-switch according to a pre-configured routing data;

the step of receiving by the soft-switch the call information the calling user initiates comprises: the soft-switch receiving the called long number that the LS sends;

20 the step of determining the route of the called user and completing the call comprises: the soft-switch obtaining the data of the Centrex according to the calling number, starting its own analysis of Centrex numbers to determine that the call is an out-group call, and then starting the procedure for handling an out-group call in IP Centrex service.

25 5. The method according to any one of Claim 1 to Claim 4, wherein the long number and short number corresponding relationship of the WAC users is saved in a long number and short number corresponding table.

6. The method according to Claim 5, wherein the long number and short number corresponding table is saved in the soft-switch.

7. The method according to Claim 5, wherein the long number and short number corresponding table is saved in the peripherals of the soft-switch.

8. The method according to Claim 5, wherein the long number and short number corresponding table is saved in a remote database;

5 the method further comprising: the soft-switch accessing the remote database directly or via a proxy.

9. The method according to Claim 8, wherein the proxy is a local database.

10 10. The method according to any one of Claim 1 to Claim 4, further comprising:
the switches belonging to the same WAC service group determining the short number
10 prefix and the out-group prefix of the WAC group through negotiation.